

3001

4

(i) Malathion

(ii) Butachlor

(iii) Cabofuran

(c) What are primary ingredients of Lipstick? Discuss the process for making of this. (5,5,5)

6. Differentiate between the following (**any five**)

(i) Perfume and deodorant

(ii) Vanishing and cold cream

(iii) Bacteriostatic and bactericidal

(iv) Face powder and talcum powder

(v) Antipyretic and analgesic

(vi) Hair dye and hair spray (5×3)

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 3001

L

Unique Paper Code : 2172552402

Name of the Paper : DSC : PHARMACEUTICALS,
COSMETICS AND
PESTICIDES

Name of the Course : **B.Sc. (Prog.) Industrial
Chemistry**

Semester : IV

Duration : 2 Hours Maximum Marks : 60

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt **four** questions in all.
3. Question No. **1** is compulsory.

1. (a) State True or False.

(i) Penicillin was discovered by Louis Pasture.

(ii) Does dapsone have antipyretic and analgesic properties?

(500)

P.T.O.

3001

2

- (iii) BHC is also known as Gammexane.
 - (iv) Analides are organophosphate pesticides.
 - (v) AZT-Zidovudine is an anti-HIV drug.
- (b) Draw the structure of the following : **Any Five**
Alachlor, Aspirin, Sulphonamide, Malathion, DDT, Glyceryl trinitrate
- (c) (i) Write down the ingredient of Shampoo.
- (ii) Define the term Analgesic and give an example.
- (iii) Dapsone belongs to which class of drug?
- (iv) Write the structure and uses of Streptomycin.
- (v) What do you understand by 'lead compound' in drug discovery? (5,5,5)
2. (a) Discuss the structure-activity relationship in the organophosphate pesticides.
- (b) Give the structure and explain the synthesis method of any one Analides pesticide.
- (c) Categorize the pesticides based on their applications. Discuss their advantages and disadvantages. (5,5,5)

3001

3

3. (a) Briefly describe how the pesticides affect the aquatic ecosystem.
- (b) What is the composition of hair dye? What is the purpose of hydrogen peroxide in hair coloring? Why is ammonia in hair dye harmful?
- (c) Write a short note on **any two** of the following :
- (i) AZT- Zidovudine
 - (ii) Phenobarbital
 - (iii) Sun-tan lotions (5,5,5)
4. (a) Give the synthesis and mode of action of paracetamol.
- (b) Give the synthesis and uses of Chloramphenicol.
- (c) Give the methods of preparation and properties of the following :
- (i) Glyceryl trinitrate
 - (ii) Aspirin (5,5,5)
5. (a) What are central nervous system agents? Discuss the preparation and major use of Diazepam.
- (b) Give the synthesis and uses of **any two** of the following pesticides:

P.T.O.